

$\Upsilon(10860)$ $I^G(J^{PC}) = 0^-(1^- -)$ **$\Upsilon(10860)$ MASS**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
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10876 ±11 OUR EVALUATION Weighted-average of Belle and BaBar results, but tripling the scaling S -factors applied to the uncertainties to account for model-dependence, handling of radiative corrections, and interference effects.

• • • We do not use the following data for averages, fits, limits, etc. • • •

10879 ± 3	1,2 CHEN	10 BELL	$e^+ e^- \rightarrow$ hadrons
10888.4 ± 2.7	3 CHEN	10 BELL	$e^+ e^- \rightarrow \Upsilon(1S, 2S, 3S) \pi^+ \pi^-$
10876 ± 2	1 AUBERT	09E BABR	$e^+ e^- \rightarrow$ hadrons
10869 ± 2	4 AUBERT	09E BABR	$e^+ e^- \rightarrow$ hadrons
10868 ± 6 ± 5	5 BESSON	85 CLEO	$e^+ e^- \rightarrow$ hadrons
10845 ± 20	6 LOVELOCK	85 CUSB	$e^+ e^- \rightarrow$ hadrons

1 In a model where a flat non-resonant $b\bar{b}$ -continuum is incoherently added to a second flat component interfering with two Breit-Wigner resonances. Systematic uncertainties not estimated.

2 The parameters of the $\Upsilon(11020)$ are fixed to those in AUBERT 09E.

3 In a model where a flat nonresonant $\Upsilon(1S, 2S, 3S) \pi^+ \pi^-$ continuum interferes with a single Breit-Wigner resonance.

4 In a model where a non-resonant $b\bar{b}$ -continuum represented by a threshold function at $\sqrt{s}=2m_B$ is incoherently added to a flat component interfering with two Breit-Wigner resonances. Not independent of other AUBERT 09E results. Systematic uncertainties not estimated.

5 Assuming four Gaussians with radiative tails and a single step in R .

6 In a coupled-channel model with three resonances and a smooth step in R .

NODE=M092M

NODE=M092M

→ UNCHECKED ←

OCCUR=2

OCCUR=2

NODE=M092M;LINKAGE=AU

NODE=M092M;LINKAGE=CH

NODE=M092M;LINKAGE=CE

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NODE=M092M;LINKAGE=BE
NODE=M092M;LINKAGE=LO

NODE=M092W

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→ UNCHECKED ←

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OCCUR=2

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NODE=M092W;LINKAGE=CE

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NODE=M092W;LINKAGE=BE
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NODE=M092215;NODE=M092

DESIG=9

DESIG=2

DESIG=3

DESIG=4

DESIG=10

DESIG=23

DESIG=24

 $\Upsilon(10860)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
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55 ±28 OUR EVALUATION Weighted-average of Belle and BaBar results, but tripling the scaling S -factors applied to the uncertainties to account for model-dependence, handling of radiative corrections, and interference effects.

• • • We do not use the following data for averages, fits, limits, etc. • • •

46 + 9 - 7	7,8 CHEN	10 BELL	$e^+ e^- \rightarrow$ hadrons
30.7 + 8.3 - 7.0 ± 3.1	9 CHEN	10 BELL	$e^+ e^- \rightarrow \Upsilon(1S, 2S, 3S) \pi^+ \pi^-$
43 ± 4	7 AUBERT	09E BABR	$e^+ e^- \rightarrow$ hadrons
74 ± 4	10 AUBERT	09E BABR	$e^+ e^- \rightarrow$ hadrons
112 ± 17 ± 23	11 BESSON	85 CLEO	$e^+ e^- \rightarrow$ hadrons
110 ± 15	12 LOVELOCK	85 CUSB	$e^+ e^- \rightarrow$ hadrons

7 In a model where a flat non-resonant $b\bar{b}$ -continuum is incoherently added to a second flat component interfering with two Breit-Wigner resonances. Systematic uncertainties not estimated.

8 The parameters of the $\Upsilon(11020)$ are fixed to those in AUBERT 09E.

9 In a model where a flat nonresonant $\Upsilon(1S, 2S, 3S) \pi^+ \pi^-$ continuum interferes with a single Breit-Wigner resonance.

10 In a model where a non-resonant $b\bar{b}$ -continuum represented by a threshold function at $\sqrt{s}=2m_B$ is incoherently added to a flat component interfering with two Breit-Wigner resonances. Not independent of other AUBERT 09E results. Systematic uncertainties not estimated.

11 Assuming four Gaussians with radiative tails and a single step in R .

12 In a coupled-channel model with three resonances and a smooth step in R .

 $\Upsilon(10860)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)	Confidence level
$\Gamma_1 B \bar{B} X$	(75.9 +2.7 -4.0) %	
$\Gamma_2 B \bar{B}$	(5.5 ±1.0) %	
$\Gamma_3 B \bar{B}^* +$ c.c.	(13.7 ±1.6) %	
$\Gamma_4 B^* \bar{B}^*$	(38.1 ±3.4) %	
$\Gamma_5 B \bar{B}^{(*)} \pi$	< 19.7 %	90%
$\Gamma_6 B \bar{B} \pi$	(0.0 ±1.2) %	
$\Gamma_7 B^* \bar{B} \pi + B \bar{B}^* \pi$	(7.3 ±2.3) %	

Γ_8	$B^* \bar{B}^* \pi$	(1.0 \pm 1.4) %		DESIG=25
Γ_9	$B \bar{B} \pi \pi$	< 8.9 %	90%	DESIG=11
Γ_{10}	$B_s^{(*)} \bar{B}_s^{(*)}$	(19.9 \pm 3.0) %		DESIG=16
Γ_{11}	$B_s \bar{B}_s$	(5 \pm 5) \times 10 ⁻³		DESIG=5
Γ_{12}	$B_s \bar{B}_s^*$ + c.c.	(1.34 \pm 0.32) %		DESIG=7
Γ_{13}	$B_s^* \bar{B}_s^*$	(17.5 \pm 2.6) %		DESIG=8
Γ_{14}	no open-bottom	(4.2 \pm 5.0) %		DESIG=28
Γ_{15}	$e^+ e^-$	(5.6 \pm 3.1) \times 10 ⁻⁶		DESIG=1
Γ_{16}	$\gamma(1S) \pi^+ \pi^-$	(5.3 \pm 0.6) \times 10 ⁻³		DESIG=17
Γ_{17}	$\gamma(2S) \pi^+ \pi^-$	(7.8 \pm 1.3) \times 10 ⁻³		DESIG=18
Γ_{18}	$\gamma(3S) \pi^+ \pi^-$	(4.8 \pm 1.9) \times 10 ⁻³		DESIG=19
Γ_{19}	$\gamma(1S) K^+ K^-$	(6.1 \pm 1.8) \times 10 ⁻⁴		DESIG=20
Γ_{20}	$h_b(1P) \pi^+ \pi^-$	(3.5 \pm 1.0) \times 10 ⁻³		DESIG=26
Γ_{21}	$h_b(2P) \pi^+ \pi^-$	(6.0 \pm 2.1) \times 10 ⁻³		DESIG=27

Inclusive Decays.

These decay modes are submodes of one or more of the decay modes above.

Γ_{22}	ϕ anything	(13.8 \pm 2.4) %		DESIG=12
Γ_{23}	D^0 anything + c.c.	(108 \pm 8) %		DESIG=13
Γ_{24}	D_s anything + c.c.	(46 \pm 6) %		DESIG=6
Γ_{25}	J/ψ anything	(2.06 \pm 0.21) %		DESIG=14
Γ_{26}	B^0 anything + c.c.	(77 \pm 8) %		DESIG=21
Γ_{27}	B^+ anything + c.c.	(72 \pm 6) %		DESIG=22

$\Upsilon(10860)$ PARTIAL WIDTHS

$\Gamma(e^+ e^-)$		Γ_{15}
VALUE (keV)	DOCUMENT ID	TECN COMMENT
0.31 \pm 0.07 OUR AVERAGE	Error includes scale factor of 1.3.	
0.22 \pm 0.05 \pm 0.07	BESSON 85 CLEO $e^+ e^- \rightarrow$ hadrons	
0.365 \pm 0.070	LOVELOCK 85 CUSB $e^+ e^- \rightarrow$ hadrons	

$\Upsilon(10860)$ BRANCHING RATIOS

"OUR EVALUATION" is obtained based on averages of rescaled data listed below. The averages and rescaling were performed by the Heavy Flavor Averaging Group (HFAG) and are described at <http://www.slac.stanford.edu/xorg/hfag/>.

$\Gamma(B \bar{B} X)/\Gamma_{\text{total}}$		Γ_1/Γ		
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
0.759 \pm 0.027 OUR EVALUATION				
0.71 \pm 0.06 OUR AVERAGE				
0.737 \pm 0.032 \pm 0.051	1063	¹³ DRUTSKOY	10 BELL	$\gamma(5S) \rightarrow B^+ X, B^0 X$
0.589 \pm 0.100 \pm 0.092		¹⁴ HUANG	07 CLEO	$\gamma(5S) \rightarrow$ hadrons

$\Gamma(B \bar{B})/\Gamma_{\text{total}}$		Γ_2/Γ		
VALUE (units 10^{-2})	CL%	DOCUMENT ID	TECN	COMMENT
5.5 \pm 1.0 \pm 0.4		¹⁵ DRUTSKOY	10 BELL	$\gamma(5S) \rightarrow B^+ X, B^0 X$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<13.8	90	¹⁴ HUANG	07 CLEO	$\gamma(5S) \rightarrow$ hadrons
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$\Gamma(B \bar{B})/\Gamma(B \bar{B} X)$		Γ_2/Γ_1		
VALUE	CL%	DOCUMENT ID	TECN	COMMENT
<0.22	90	AQUINES	06 CLE3	$\gamma(5S) \rightarrow$ hadrons

NODE=M092;CLUMP=I

NODE=M092

DESIG=12

DESIG=13

DESIG=6

DESIG=14

DESIG=21

DESIG=22

NODE=M092220

NODE=M092W1

NODE=M092W1

NODE=M092230

NODE=M092230

NODE=M092R13

NODE=M092R13

→ UNCHECKED ←

NODE=M092R16

NODE=M092R16

NODE=M092R05

NODE=M092R05

$\Gamma(B\bar{B}^* + c.c.)/\Gamma_{\text{total}}$	Γ_3/Γ	NODE=M092R15 NODE=M092R15
0.137±0.016 OUR AVERAGE		
0.137±0.013±0.011	15 DRUTSKOY 10 BELL $\gamma(5S) \rightarrow B^+ X, B^0 X$	
0.143±0.053±0.027	14 HUANG 07 CLEO $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B\bar{B}^* + c.c.)/\Gamma(B\bar{B}X)$	Γ_3/Γ_1	NODE=M092R06 NODE=M092R06
0.24±0.09±0.03	EVTS	
10	AQUINES 06 CLE3 $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B^*\bar{B}^*)/\Gamma_{\text{total}}$	Γ_4/Γ	NODE=M092R14 NODE=M092R14
0.381±0.034 OUR AVERAGE		
0.375 ^{+0.021} _{-0.019} ±0.030	15 DRUTSKOY 10 BELL $\gamma(5S) \rightarrow B^+ X, B^0 X$	
0.436±0.083±0.072	14 HUANG 07 CLEO $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B^*\bar{B}^*)/\Gamma(B\bar{B}X)$	Γ_4/Γ_1	NODE=M092R07 NODE=M092R07
0.74±0.15±0.08	EVTS	
31	AQUINES 06 CLE3 $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B\bar{B}^{(*)}\pi)/\Gamma_{\text{total}}$	Γ_5/Γ	NODE=M092R17 NODE=M092R17
<0.197	CL%	
90	14 HUANG 07 CLEO $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B\bar{B}^{(*)}\pi)/\Gamma(B\bar{B}X)$	Γ_5/Γ_1	NODE=M092R08 NODE=M092R08
<0.32	CL%	
90	AQUINES 06 CLE3 $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B\bar{B}\pi)/\Gamma_{\text{total}}$	Γ_6/Γ	NODE=M092R28 NODE=M092R28
0.0±1.2±0.3	EVTS	
0	15 DRUTSKOY 10 BELL $\gamma(5S) \rightarrow B^{+,0} \pi^- X$	
$[\Gamma(B^*\bar{B}\pi) + \Gamma(B\bar{B}^*\pi)]/\Gamma_{\text{total}}$	Γ_7/Γ	NODE=M092R29 NODE=M092R29
7.3^{+2.3}_{-2.1}±0.8	EVTS	
38	15 DRUTSKOY 10 BELL $\gamma(5S) \rightarrow B^{+,0} \pi^- X$	
$\Gamma(B^*\bar{B}^*\pi)/\Gamma_{\text{total}}$	Γ_8/Γ	NODE=M092R30 NODE=M092R30
1.0^{+1.4}_{-1.3}±0.4	EVTS	
5	15 DRUTSKOY 10 BELL $\gamma(5S) \rightarrow B^{+,0} \pi^- X$	
$\Gamma(B\bar{B}\pi\pi)/\Gamma_{\text{total}}$	Γ_9/Γ	NODE=M092R18 NODE=M092R18
<0.089	CL%	
90	14 HUANG 07 CLEO $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B\bar{B}\pi\pi)/\Gamma(B\bar{B}X)$	Γ_9/Γ_1	NODE=M092R09 NODE=M092R09
<0.14	CL%	
90	AQUINES 06 CLE3 $\gamma(5S) \rightarrow \text{hadrons}$	
$\Gamma(B_s^{(*)}\bar{B}_s^{(*)})/\Gamma_{\text{total}}$	$\Gamma_{10}/\Gamma = (\Gamma_{11} + \Gamma_{12} + \Gamma_{13})/\Gamma$	NODE=M092R01 NODE=M092R01 → UNCHECKED ←
0.199±0.030 OUR EVALUATION	DOCUMENT ID	
0.189^{+0.027}_{-0.021} OUR AVERAGE	TECN	
[0.195 ^{+0.030} _{-0.023} OUR 2012 AVERAGE]	COMMENT	
0.172±0.030	16 ESEN 13 BELL $\gamma(5S) \rightarrow D^0 X, D_s X$	
0.21 ^{+0.06} _{-0.03}	17 HUANG 07 CLEO $\gamma(5S) \rightarrow D_s X$	
• • • We do not use the following data for averages, fits, limits, etc. • • •		
0.180±0.013±0.032	18 DRUTSKOY 07 BELL $\gamma(5S) \rightarrow D^0 X, D_s X$	
0.160±0.026±0.058	19 ARTUSO 05B CLEO $e^+ e^- \rightarrow D_X X$	

$\Gamma(B_s^{(*)}\bar{B}_s^{(*)})/\Gamma(B\bar{B}X)$	Γ_{10}/Γ_1	NODE=M092R34 NODE=M092R34		
<u>VALUE</u>	<u>DOCUMENT ID</u>			
$0.262^{+0.051}_{-0.043}$ OUR EVALUATION		→ UNCHECKED ←		
$\Gamma(B_s^*\bar{B}_s^*)/\Gamma(B_s^{(*)}\bar{B}_s^{(*)})$	$\Gamma_{13}/\Gamma_{10} = \Gamma_{13}/(\Gamma_{11}+\Gamma_{12}+\Gamma_{13})$	NODE=M092R19 NODE=M092R19		
<u>VALUE (units 10^{-2})</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$87.8^{+1.5}_{-1.5}$ OUR AVERAGE				
$[(90 \pm 4) \times 10^{-2}$ OUR 2012 AVERAGE]				
87.0±1.7	20,21	ESEN	13	BELL $B_s^0 \rightarrow D_s^- \pi^+$
90.5±3.2±0.1	227	21,22 LI	12	BELL $B_s^0 \rightarrow J/\psi \eta^{(')}$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
90.1 $^{+3.8}_{-4.0}$ ±0.2	23	LOUVOT	09	BELL $e^+ e^- \rightarrow B_s^{(*)}\bar{B}_s^{(*)}$
93 $^{+7}_{-9}$ ±1	23	DRUTSKOY	07A	BELL Superseded by LOUVOT 09
$\Gamma(B_s\bar{B}_s)/\Gamma(B_s^{(*)}\bar{B}_s^{(*)})$	$\Gamma_{11}/\Gamma_{10} = \Gamma_{11}/(\Gamma_{11}+\Gamma_{12}+\Gamma_{13})$	NODE=M092R24 NODE=M092R24		
<u>VALUE (units 10^{-2})</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
$2.6^{+2.6}_{-2.5}$	LOUVOT	09	BELL $10.86 e^+ e^- \rightarrow B_s^{(*)}\bar{B}_s^{(*)}$	
$\Gamma(B_s\bar{B}_s)/\Gamma(B_s^*\bar{B}_s^*)$	Γ_{11}/Γ_{13}	NODE=M092R03 NODE=M092R03		
<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<0.16	90	BONVICINI	06	CLE3 $e^+ e^-$
$\Gamma(B_s\bar{B}_s^* + c.c.)/\Gamma(B_s^{(*)}\bar{B}_s^{(*)})$	$\Gamma_{12}/\Gamma_{10} = \Gamma_{12}/(\Gamma_{11}+\Gamma_{12}+\Gamma_{13})$	NODE=M092R25 NODE=M092R25		
<u>VALUE (units 10^{-2})</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$6.7^{+1.2}_{-1.2}$ OUR AVERAGE				
$[(7.3 \pm 3.2) \times 10^{-2}$ OUR 2012 AVERAGE]				
7.3±1.4	20,21	ESEN	13	BELL $B_s^0 \rightarrow D_s^- \pi^+$
4.9±2.5±0.0	227	21,22 LI	12	BELL $B_s^0 \rightarrow J/\psi \eta^{(')}$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
7.3 $^{+3.3}_{-3.0}$ ±0.1	LOUVOT	09	BELL $10.86 e^+ e^- \rightarrow B_s^{(*)}\bar{B}_s^{(*)}$	
$\Gamma(B_s\bar{B}_s^* + c.c.)/\Gamma(B_s^*\bar{B}_s^*)$	Γ_{12}/Γ_{13}	NODE=M092R04 NODE=M092R04		
<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<0.16	90	BONVICINI	06	CLE3 $e^+ e^-$
$\Gamma(\text{no open-bottom})/\Gamma_{\text{total}}$	Γ_{14}/Γ	NODE=M092R33 NODE=M092R33		
<u>VALUE</u>		<u>DOCUMENT ID</u>		
$0.042^{+0.046}_{-0.006}$ OUR EVALUATION				→ UNCHECKED ←
$\Gamma(\gamma(1S)\pi^+\pi^-)/\Gamma_{\text{total}}$	Γ_{16}/Γ	NODE=M092R20 NODE=M092R20		
<u>VALUE (units 10^{-3})</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$5.3^{+0.3}_{-0.5} \pm 0.5$	325	24 CHEN	08	BELL $10.87 e^+ e^- \rightarrow \gamma(1S)\pi^+\pi^-$
$\Gamma(\gamma(2S)\pi^+\pi^-)/\Gamma_{\text{total}}$	Γ_{17}/Γ	NODE=M092R21 NODE=M092R21		
<u>VALUE (units 10^{-3})</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$7.8^{+0.6}_{-0.6} \pm 1.1$	186	24 CHEN	08	BELL $10.87 e^+ e^- \rightarrow \gamma(2S)\pi^+\pi^-$
$\Gamma(\gamma(3S)\pi^+\pi^-)/\Gamma_{\text{total}}$	Γ_{18}/Γ	NODE=M092R22 NODE=M092R22		
<u>VALUE (units 10^{-3})</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$4.8^{+1.8}_{-1.5} \pm 0.7$	10	24 CHEN	08	BELL $10.87 e^+ e^- \rightarrow \gamma(3S)\pi^+\pi^-$
$\Gamma(\gamma(1S)K^+K^-)/\Gamma_{\text{total}}$	Γ_{19}/Γ	NODE=M092R23 NODE=M092R23		
<u>VALUE (units 10^{-4})</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$6.1^{+1.6}_{-1.4} \pm 1.0$	20	24 CHEN	08	BELL $10.87 e^+ e^- \rightarrow \gamma(1S)K^+K^-$

$\Gamma(h_b(1P)\pi^+\pi^-)/\Gamma(\Upsilon(2S)\pi^+\pi^-)$				Γ_{20}/Γ_{17}		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>			
0.45±0.08^{+0.07}_{-0.12}	ADACHI	12	BELL	10.86 $e^+e^- \rightarrow$ hadrons	NODE=M092R31 NODE=M092R31	
$\Gamma(h_b(2P)\pi^+\pi^-)/\Gamma(\Upsilon(2S)\pi^+\pi^-)$				Γ_{21}/Γ_{17}		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>			
0.77±0.08^{+0.22}_{-0.17}	ADACHI	12	BELL	10.86 $e^+e^- \rightarrow$ hadrons	NODE=M092R32 NODE=M092R32	
$\Gamma(\phi \text{ anything})/\Gamma_{\text{total}}$				Γ_{22}/Γ		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>			
0.138±0.007^{+0.023}_{-0.015}	HUANG	07	CLEO	$\Upsilon(5S) \rightarrow \phi X$	NODE=M092R12 NODE=M092R12	
$\Gamma(D^0 \text{ anything} + \text{c.c.})/\Gamma_{\text{total}}$				Γ_{23}/Γ		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>			
1.076±0.040±0.068	DRUTSKOY	07	BELL	$\Upsilon(5S) \rightarrow D^0 X$	NODE=M092R10 NODE=M092R10	
$\Gamma(D_s \text{ anything} + \text{c.c.})/\Gamma_{\text{total}}$				Γ_{24}/Γ		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>			
0.46 ± 0.06 OUR AVERAGE					NODE=M092R02 NODE=M092R02	
0.472±0.024±0.072	18 DRUTSKOY	07	BELL	$\Upsilon(5S) \rightarrow D_s X$		
0.44 ± 0.09 ± 0.04	25 ARTUSO	05B	CLE3	$e^+e^- \rightarrow D_s X$		
$\Gamma(J/\psi \text{ anything})/\Gamma_{\text{total}}$				Γ_{25}/Γ		
<u>VALUE (units 10^{-2})</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>			
2.060±0.160±0.134	DRUTSKOY	07	BELL	$\Upsilon(5S) \rightarrow J/\psi X$	NODE=M092R11 NODE=M092R11	
$\Gamma(B^0 \text{ anything} + \text{c.c.})/\Gamma_{\text{total}}$				Γ_{26}/Γ		
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
0.770^{+0.058}_{-0.056}±0.061	352	DRUTSKOY	10	BELL	$\Upsilon(5S) \rightarrow B^0 X$	NODE=M092R26 NODE=M092R26
$\Gamma(B^+ \text{ anything} + \text{c.c.})/\Gamma_{\text{total}}$				Γ_{27}/Γ		
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
0.721^{+0.039}_{-0.038}±0.050	711	DRUTSKOY	10	BELL	$\Upsilon(5S) \rightarrow B^+ X$	NODE=M092R27 NODE=M092R27
13 Not independent of DRUTSKOY 10 values for $\Upsilon(5S) \rightarrow B^{\pm,0}$ anything.						
14 Using measurements or limits from AQUINES 06.						
15 Assuming isospin conservation.						
16 Supersedes DRUTSKOY 07.						
17 Supersedes ARTUSO 05B. Combining inclusive ϕ , D_s , and B measurements. Using $B(D_s^+ \rightarrow \phi\pi^+) = 4.4 \pm 0.6\%$ from PDG 06.						
18 Using $B(D_s^+ \rightarrow \phi\pi^+) = (4.4 \pm 0.6)\%$ from PDG 06.						
19 Uses a model-dependent estimate $B(B_s \rightarrow D_s X) = (92 \pm 11)\%$.						
20 Supersedes LOUVOT 09.						
21 With $N(B_s^{(*)}\bar{B}_s^{(*)}) = (7.11 \pm 1.30) \times 10^6$.						
22 The ratios $N(B_s^*\bar{B}_s^*)/N(B_s^{(*)}\bar{B}_s^{(*)})$ and $N(B_s^*\bar{B}_s^0)/N(B_s^{(*)}\bar{B}_s^{(*)})$ are measured with a correlation coefficient of -0.72.						
23 From a measurement of $\sigma(e^+e^- \rightarrow B_s^*\bar{B}_s^*)/\sigma(e^+e^- \rightarrow B_s^{(*)}\bar{B}_s^{(*)})$ at $\sqrt{s} = 10.86$ GeV.						
24 Assuming that the observed events are solely due to the $\Upsilon(5S)$ resonance.						
25 ARTUSO 05B reports $[\Gamma(\Upsilon(10860) \rightarrow D_s \text{ anything} + \text{c.c.})/\Gamma_{\text{total}}] \times [B(D_s^+ \rightarrow \phi\pi^+)] = 0.0198 \pm 0.0019 \pm 0.0038$ which we divide by our best value $B(D_s^+ \rightarrow \phi\pi^+) = (4.5 \pm 0.4) \times 10^{-2}$. Our first error is their experiment's error and our second error is the systematic error from using our best value.						

$\gamma(10860)$ REFERENCES

NODE=M092

ESEN	13	PR D87 031101	S. Esen <i>et al.</i>	(BELLE Collab.)	REFID=54894
ADACHI	12	PRL 108 032001	I. Adachi <i>et al.</i>	(BELLE Collab.)	REFID=53962
LI	12	PRL 108 181808	J. Li <i>et al.</i>	(BELLE Collab.)	REFID=54116
CHEN	10	PR D82 091106	K.-F. Chen <i>et al.</i>	(BELLE Collab.)	REFID=53531
DRUTSKOY	10	PR D81 112003	A. Drutskoy <i>et al.</i>	(BELLE Collab.)	REFID=53358
AUBERT	09E	PRL 102 012001	B. Aubert <i>et al.</i>	(BABAR Collab.)	REFID=52661
LOUVOT	09	PRL 102 021801	R. Louvot <i>et al.</i>	(BELLE Collab.)	REFID=52646
CHEN	08	PRL 100 112001	K.-F. Chen <i>et al.</i>	(BELLE Collab.)	REFID=52153
DRUTSKOY	07	PRL 98 052001	A. Drutskoy <i>et al.</i>	(BELLE Collab.)	REFID=51621
DRUTSKOY	07A	PR D76 012002	A. Drutskoy <i>et al.</i>	(BELLE Collab.)	REFID=51852
HUANG	07	PR D75 012002	G.S. Huang <i>et al.</i>	(CLEO Collab.)	REFID=51624
AQUINES	06	PRL 96 152001	O. Aquines <i>et al.</i>	(CLEO Collab.)	REFID=51106
BONVICINI	06	PRL 96 022002	G. Bonvicini <i>et al.</i>	(CLEO Collab.)	REFID=50995
PDG	06	JPG 33 1	W.-M. Yao <i>et al.</i>	(PDG Collab.)	REFID=51004
ARTUSO	05B	PRL 95 261801	M. Artuso <i>et al.</i>	(CLEO Collab.)	REFID=50992
BESSON	85	PRL 54 381	D. Besson <i>et al.</i>	(CLEO Collab.)	REFID=22368
LOVELOCK	85	PRL 54 377	D.M.J. Lovelock <i>et al.</i>	(CUSB Collab.)	REFID=22369
